With the advent of graphic block programming and other forms of collaborative visual analytics in increasingly powerful mainstream GIS, remote sensing and other geospatial workflows have tended toward greater complexity. While complexity may often be necessary to augment quality in geospatial artifacts, understanding of complexity requires access to provenance information in whatever form it may be available. A challenge to the collaborative integration of (and therefore trust in) complex methods is the reality of heterogeneous workflows designed for single users. New provenance-related Web standards from the Worldwide Web Consortium (W3C) such as PROV have a strong potential to facilitate service oriented architecture (SOA)-based geospatial provenance (and workflow) interchange. This progress is vital both to better understand and condense complex workflows. Given that the new Web standards are not currently implemented in mainstream GIS, this presentation will highlight progress in single user capture, a preliminary step in the provenance life cycle. For example, one long-tested method involves parsing of GIS log files to generate standard provenance. Another includes development of customized graphic block programming environments specifically designed for provenance and workflow interoperability. As will be argued, provenance capture is of limited use without development of life cycles goals for these records. In an educational or research setting, computed trust metrics and efficient comparative workflow execution within a laboratory team are two valuable use cases that will be explored.